Communications Management Process

Communications Management Process identifies, plans, develops and distributes messages to program personnel, and other SFA stakeholder groups. It should convey the right message, from the right communicator, to the right audience, through the right channel, at the right time. The goal of the Communications Management Process is to ensure that effective communications concerning the program and the sponsoring organization are delivered throughout the program project teams, the SFA organization, and key external stakeholders.

Communication Plan
The Modernization Partner in association with the Organizational Transformation Team and the SFA Director of Communications will develop a communication plan which will convey the right message, from the right communicator, to the right audience, through the right channel, at the right time.

1.0 Identify Communication Needs
Utilizing the Communications plan as an input, the Modernization program and projects and SFA organizational entities identify planned as well as new communication subjects and topics that need to be communicated to other areas of the program, SFA organization, and external entities.

2.0 Develop Approach
The Modernization Partner along with the Director of Communications plan the development and distribution of communications. This process addresses the six basic elements of communications: communicator, message, communication channel, feedback mechanism, receiver / audience, and time frame. A critical step in this process is identifying the audience because this drives the medium and distribution channel.

3.0 Develop Message/Content
In developing Communication Content / Message, the Modernization Partner along with the Director of Communication will gather and develop the content. The messages may take the form of an interactive intranet page, *"Inside the SFA"*, e-mail, voice mail, print, video, and presentations. Development is not just limited to subject matter, but may also include graphics, power point slides, and intranet web page development, which are unique to each medium.

4.0 Distribute Communication
Distribution of communication plays a key role in successfully achieving outcomes in this process. In order to reach the correct target audience with the right message from the right entity at the right time. The distribution of internal communications to the Program team will be completed by the Modernization Partner, while internal SFA communications and external communications will be completed by the Director of Communications.

Configuration Management Process

The purpose of the Modernization Configuration Management Process is to identify and maintain configuration changes throughout the full life cycle of the SFA Modernization Program, while ensuring the integrity of existing baseline systems. The configuration management process is designed to ensure that changes to the SFA environment 1) align with both SFA strategic and business objectives, 2) meet

Modernization Blueprint and existing requirements, 3) are coordinated, controlled and integrated to deliver real tangible business capabilities, and 4) conform to existing architecture or planned architecture enhancements. There are two attachments included at the end of this section which depict the process areas within Configuration Management and illustrate the relationship between Configuration Management, Configuration Control Board, IRB, DSG, and PRB. Attachment A illustrates five process areas within Configuration Management and the relationship between Configuration Management, and the IRB and DSG. Attachment B depicts the relationship between Configuration Management, Configuration Control Board, IRB, DSG, Quality Assurance, and PRB as well as the role of each area in the process.

1.0 Identify and Request Change

All Change Identification and Requests are made in accordance with the business requirements of the Modernization Blueprint. Change requests include identified problems / defects and enhancements in both new and existing systems. Change requests are initiated by the members of the affected SFA business area (i.e., the channels or the CIO, Modernization partner, legacy vendors) with the assistance and participation of the configuration management team. Change Requests are submitted using the Change Request form. This form should be completely filled out and given to the Change Control coordinator for entry into the Change Management Tool.

2.0 Assess Change Request

Change requests are evaluated by a change control coordinator who determines the impact of the proposed change to the SFA environment. The change control coordinator reviews the change request at weekly configuration management team status meeting and logs assessment. The following criteria will be applied:

- Alignment with SFA strategic goals and business requirements of the Modernization Blueprint;
- Reasonable expectation of tangible benefits;
- Conformance to existing architecture and / or planned enhancement to Modernization Blueprint architecture.

3.0 Develop Response

Change requests initiator provides a clear change plan which should include a contingency and backout plan. The plan should be communicated to all appropriate parties. The change plan should have the following:

- Cost of making the change in terms of resources, time and money
- Benefits resulting from deploying the change
- Implications of not making the change
- Effect the change may have on the technology infrastructure or the user community

4.0 Assess Quality

In assessing quality, the Change Control Board reviews change requests against IRB requirements and Enterprise Architecture standards and methodologies. The Change Control Board ensures that changes are prioritized, coordinated, controlled and integrated within the program quality framework and result in real, tangible benefits. Authorized changes are included in a rollout plan. Deferred or rejected requests are reviewed and resubmitted if needed.

5.0 Determine Release

Authorized changes are packaged into a release management program. The Modernization Partner, QA and Configuration Management teams audit the releases, record deficiencies and report corrective actions. The audits and reviews should:

- Be performed periodically to ensure the integrity of the system baseline
- Be performed before every major baseline
- Verify that changes to the baseline are implemented as intended

6.0 Assess Release Readiness

Release Readiness is the process by which the product development organization, Configuration Management Team, QA and COTR determine the readiness of a product for general distribution. The controlling document or repository of documents, together form the release plan (for the product). The release plan which includes: facilities (logistics) plan, training plan, software & hardware rollout schedules and organization change requirements are evaluated to ensure that the planned release is ready for deployment. The Configuration Management team, respective COTRs, CIO and Business Area (Channel, CIO, CFO, etc.), along with input from the Modernization Partner, will use the Quality Assurance Framework and determine the readiness of the proposed product release.

7.0 Implement Change

Upon release readiness approval, the product is transitioned to the deployment team. According to the release plan, the deployment team confirms the schedules (shipment software/hardware), training dates & personnel to attend (if required). Changes are implemented by SFA Deployment team and verified by the Configuration Management team with strict adherence to the Modernization Blueprint . This task is done with assistance from the Modernization Partner. A final review meeting is held to review outstanding issues. Depending on priority, these issues are addressed/recorded by the Configuration Management team (and assigned a responsible party).

8.0 Update the Blueprint

The Modernization Blueprint will be updated to reflect the outcome of the process.

Investment Management Process

The Investment Management Process will provide continued support for maturing the IT Investment Management Process. The process is designed to ensure that investments in new projects and capabilities at SFA are 1) aligned with SFA strategy; 2) result in real, tangible benefits; 3) conform to technical architecture; 4) utilize an executable programmatic approach; and 5) use commercial best practices.

1.0 Submit Funding Request – Channel or Business Area Member, Modernization Partner

Funding requests are developed by members of the affected SFA business area (i.e., the channels or the CIO, CFO) with the assistance and participation of the business area's Modernization Partner representative. Funding Requests are submitted using the *IT Initiative Funding Request* form (see attached). This form should be completely filled out and given to the Decision Support Group for entry into the IRB Funding Request Database.

2.0 Analyze Strategic Alignment – Decision Support Group, Modernization Partner

Funding requests for amounts over $250,000 or for amounts over $50,000 that affect one of the four strategic architecture areas (Internet, Call Centers, Data Warehousing, and Integration Architecture) and that impact multiple channels, organizational entities, and/or have other project interdependencies will be evaluated by the Decision Support Group to ensure they are aligned with SFA strategy and meet the following criteria:

- Alignment with SFA strategic goals and business objectives;
- Delivery of tangible benefits;
- Conformance to existing technical architecture or planned enhancement to Blueprint architecture;
- Executable programmatic approach that provides business value; and
- Use of commercial best practices.

Individual projects over $250,000 that align with the SFA strategy and meet the established criteria will be forwarded to step *3.0 Develop Business Case.* Those that do not will be returned to the initiator with explanation.

Projects that are over $50,000 but also impact multiple channels, organizational entities, and other projects and are aligned with the SFA Strategy and meet the established criteria, may be consolidated with other new or existing projects aimed at delivering a cross organizational solution and taking advantage of synergies and economies of scale. These projects will be forwarded to step *3.0 Develop Business Case*.

3.0 Develop Business Case

As stated previously, projects that align with SFA strategy and meet the established criteria will receive funding for the development of a detailed business case. The funding will cover legacy contractor, modernization partner, and SFA Functional Unit efforts to develop appropriate business case materials. This business case will include:

- Economic Benefits Analysis including detailed analysis of SFA cost driver impacts and annualized cost savings over next five fiscal years;
- Explanation of use of commercial best practice and use of COTS in proposed solution; and
- Timetable for development / implementation which outlines milestones and key deliverables.
- Cost Estimate including detailed analysis of development and operating costs over next five fiscal years; and
- Detailed description of top risks to project success and identification of mitigating circumstances for each risk with timetable for each mitigating circumstance;
- Analysis of ease of implementation including assessment of organization and cultures ability to change and readiness for change;

Templates for the Business Case are available (see attached) and support is available from the Modernization Partner team (i.e., ITRs, Enterprise Architecture, Decision Support Group, etc).

4.0 Review Business Case / Develop Recommendation

Once the business case is submitted to the Decision Support Group (DSG), the project will be evaluated by the DSG to develop a recommendation to the IRB based upon the established criteria. All projects will be forwarded to the IRB if they are either *Supported* or *Not-supported* along with an explanation of

the recommendation. The recommendation will include a rating and ranking around strategic alignment and established criteria. Business cases that do not include adequate information to form a recommendation will be returned to the initiator.

5.0 IRB Review

The IRB will make the final decision on project approval and funding based upon the input received from the Decision Support Group. Key check points will be established for project control and review

6.0 Establish Integrated Project Teams

Integrated Project Teams (IPT) will be constituted for approved projects. The SFA Business Channel appoints a channel IPT leader and IPT members. CIO will appoint an IPT co-leader and IPT members. Working with the Modernization Partner the IPT will define the requirements for a statement of work (SOW), initiate the project, execute the project, and manage the project through to completion.

7.0 Periodic Review

Along with the Modernization Partner the IPT will manage the execution of the project and will monitor status throughout the project. Periodic reviews will be conducted with the project sponsor (Channels, CIO, CFO, etc.) and the Modernization Partner to ensure projects are delivering results.

Issue Management Process

Issue Management involves the process for identification, analysis, resolution, and reporting of the program's issues --- concerns that have the potential to impact the success of the program.
This process will facilitate focused issue resolution, monitor progress and highlight risks. The Issue Management Process begins when a concern is entered into the issue management database, and ends when an issue is resolved, published and closed. The Issue Management process includes monitoring the status of each of the concerns / issues.

1.0 Identify Issues

Issue management first takes place on a project level. For those issues not resolved at the project level, the Modernization Partner will develop an issues tracking database for the management of program issues. An issue may be entered by anyone . The objective of the issue management function of the database is to collect as much information as possible up-front. Once a concern is entered into the database, the status becomes “ENTERED CONCERN”(more status information will be detailed in section 2.0). At this point, the Modernization Partner will begin checking the concern for relevance. The concern is analyzed in terms of priority, people affected by the concern, possible solutions, potential issue owner and resolution due date.

2.0 Categorize Issues

Issues will be broken down into status categories as mentioned in section 1.0. The categories and descriptions are as follows:

Entered concern - The potential issue has been entered into the issue management database by a business representative.

Request for clarification - The potential issue is in the process of being clarified

by the appropriate people. The PMO is waiting for clarification so that it can continue reviewing the potential issue.

Request for approval - The potential issue is being reviewed by the PMO to determine if the concern should be considered an open issue.

Open issue - The potential issue has been confirmed as an actual issue that will be managed by the PMO. An Issue ID has been assigned and the issue owner has been notified and accepts responsibility for resolving the issue.

Open (ongoing) - The potential issue has been confirmed as an actual issue that will be managed by the PMO. Due to the nature of the issue, it cannot be resolved until the program is completed. An Issue ID has been assigned and the issue owner has been notified and accepts responsibility for resolving the issue.

Closed (resolved) - The issue has been resolved through the issue management process and the solution has been published. Only Issue Owner and PMO will have the authority to close an open issue.

Closed (other) - The potential issue has been closed somewhere within the issue management process for various reasons, e.g., Out of scope, not really an issue, another group's issue, and is no longer a concern of the Modernization Partner. Only Issue Owner and Issues Program Manager) will have the authority to close a potential issue.

3.0 Resolve Issues

The Modernization Partner will proactively manage open issues to facilitate their timely resolution. Issues will be categorized into four levels of importance, Mission Critical, High, Medium and Low, based on their impact to the Program goals and objectives, timeline and costs and will be considered as action items. All issues will be reported to the Manager of the Program Management Office. Special focus will be given to issues meeting the following criteria:

- Mission Critical issues
- Past due issues (Mission Critical, High, Medium and Low)
- High, Medium and Low importance issues with due dates within the next month

Since the resolution of issues may require attention of senior management, a detail escalation process will be utilized to facilitate issue resolution. Periodic meetings will be scheduled to facilitate the resolution of open issues. Issues will be escalated to the Program's senior management based on their level of importance and impact. The escalation process consists of four levels, they are: Project Team, Functional Unit, Management Council and the COO / Modernization Program Manager.

The Project team is the first level in the escalation process. The Project team will work with the team contacts to ensure issues are properly addressed. The Project team will escalate issues that require additional management attention to the affected functional unit representatives. Based on the issues level of importance and time criticality, the Functional Unit representatives in conjunction with the SFA Modernization Partner Management Team will determine whether to escalate the issue to Management

Council. If necessary, the Management Council will evaluate the issue and determine the issue's impact on the program objectives, scope, costs, and timeline. The Management Council will escalate the issue to the COO and Modernization Program Manager to determine the appropriate steps to ensure that the issue is resolved. For those issues that cannot be resolved will be incorporated .into the Modernization Risk Management Plan. The Risk Management Plan will be included in the Program Plan

4.0 Publish Solution and Close Issue

To publish the solution, all issues must be agreed upon by the Modernization Partner and the SFA. Once agreed upon, the resolution of the issue will be published to all affected parties and the issues management database can be updated with a detailed description of the resolution.

5.0 Reporting

Issues will be reported to the SFA through weekly status reports and monthly program status reports.

Quality Management Process

The underlying objective of the proposed Quality Management Process is to ensure that all projects, undertaken by the Modernization Partner or other contractors in conjunction with the Department of Education, meet or exceed the expectations of the defined stakeholders while adhering to the established business guidelines and documented business rules.

The Modernization Partner intends to establish a methodology to assist in undertaking periodic reviews of all deliverables in-process and for facilitating reporting on the status of the overall program operations. These will be achieved through the establishment of specific metrics which can be used to provide an objective and measurable means of assessing progress and a series of assessments and recommendations which will be used to provide a more all-encompassing and independent view of project status.

The quantitative nature of the metrics together with the independent assessment of status will form the basis of a Lessons Learned database which will be used to fine tune future projects and avoid an iteration of known pitfalls or problems.

The process of assessing and ensuring quality, will be an ongoing process throughout the life cycle of all projects. As the various projects enter specific phases, different yet consistent criteria for assessing quality will be used. For example the Modernization Partner will, in all applicable cases, assess the quality of testing as a component of implementation. Through measurable criteria, we will report on the effectiveness of test plans and the applicability of the overall system validation strategy. These findings may be used to fine tune the test plan in the early stages of the life cycle thus ensuring more rigorous validation prior to implementation.

Quality Achievement Process

1.0 Document and Publish Business Rules

One of the critical components of the Modernization Partner's quality Management Process is the Department of Education's business rules and guide lines. In all applicable cases, the Modernization Partner will assess the quality of deliverables and requirements against these business rules. Adherence to these business rules will be a major quality focus on all ED sponsored projects.

2.0 Identify Project Level Stakeholders

Project level stakeholders are considered key sponsors of particular projects. It is entirely possible that a given project will be assigned to several project level stakeholders. In these instances, the Modernization Partner will aim to coordinate efforts amongst the various sponsors and ensure that the final deliverable is one that satisfies all known requirements by all stakeholders.

The Quality Management Process will assess the degree to which the Modernization Partner and the various stakeholders were successful in achieving this goal. Lessons learned items will be critical to ensuring that future projects adhere to this critical component.

3.0 Define Stakeholders' Expectations

Understanding the expectation of stakeholders is critical to the success of a project. The quality Management Process will develop criteria to assess the degree to which these expectations were defined and documented. It also will develop checkpoints, throughout the project life cycle, intended to ensure that expectations are refined where necessary.

The Modernization Partner also will develop quality criteria which may be used to categorize and prioritize expectations, while providing a tracking tool to capture status for these expectations.

4.0 Define Quality Verification Process

The Modernization Partner will identify the underlying criteria which may be used to assess the overall level of project quality. We also will define the criteria and processes by which desired quality levels will be ensured.

It is our objective to apply modified versions of quality management to all projects undertaken as a component of the Modernization Blue Print. Approaches to this goal will be further defined in the Detail Quality Plan, but in short may include periodic program / project reviews, peer reviews, walkthroughs, readiness assessments, stakeholder reviews and team satisfaction measurements.

We also will plan to assess various "Post Implementation" quality factors. In doing so, we will gauge the degree to which the "Expected Benefits" for a given project were realized in the post implementation era. This information will be useful in assessing future or related benefits and may be critical in approving additional phases or related enhancements.

5.0 Define Metrics

The Modernization Partner will aim to define criteria that will be used to assess a variety of quality factors for each given project. These metrics will be aligned with the Blueprint Performance Plan and

the objectives of the sponsoring organization. There are three important factors regarding these metrics:

(a) While every attempt will be made to define a comprehensive list of these quantitative measures, it is possible that additional ones will be identified during later projects. The Modernization Partner will enhance the list of these metrics as additional components are identified or made redundant.

(b) The application of these metrics will be, in part, dependent on the nature of the project. It is entirely possible that certain projects will only utilize a subset of the criteria.

(c) The Modernization Partner is committed to augmenting these quantitative metrics with independent reviews and readiness assessments. We will develop a standard format for these reviews and utilize them to provide a high level synopsis of the status of a given project.

One of the most critical components of quality management is the tracking of a variety of pre-defined and quantifiable metrics which may be used to assess the success of a project. It is important that these metrics are well defined, well known and measurable. Ambiguous metrics will produce negative effects since their application and usefulness will be questionable.

The Modernization Partner believes that, where possible, these metrics should be flexible enough to accommodate specific idiosyncrasies of particular projects. It is entirely possible that quality metrics suited to one project may be inappropriate for another. To this end, the Modernization Partner is recommending the following quality related metrics which, in our opinion, provide a useful tool for assessing the quality of a variety of ED sponsored projects:

1. User Requirements Analysis and Documentation

The compilation of a comprehensive user requirements document is a critical success factor for any software development project. These requirements form the basis of system design, and as such are a major factor in the success of code construction, testing, code delivery and implementation. Additionally, late or undefined user requirements invariably lead to increased costs or missed deadlines. The Modernization Partner will compile a “Development Life Cycle” check list, which will include major tasks and milestones necessary to compile a comprehensive user requirements document. Advantages associated with this metric is as follows:

- A high level guideline for a series of necessary steps which, if followed, should lead to a clear user requirements document.
- A clear measurement tool for assessing weather or not critical tasks, during requirements analysis, were followed.
- A flexible tool with applicability to a variety of projects and the inherent ability to be modified as needed.

2. Code Construction

The ability of the construction and test team to deliver code in support of user requirements is a valid measurement of quality. The Modernization Partner will track this metric by way of “System

Investigation Reports" (SIRS) which will be issued by the Test Team. SIRs document instances where actual results do not meet expected [test] outcomes. Benefits associated with this metric are:

- Ability to gauge the adequacy of user requirements. Since Expected Results would have been calculated based on the requirements document, invalid requirements would inevitably lead to invalid results.
- Ability to provide quantifiable measurement of the quality of code delivered to the test teams.
- The provision of a tool to measure the effectiveness of the test team and their quality of work. SIRs which are immediately attributed to invalid test conditions or test environments, will provide a useful training and assessment tool for testers.
- Ability to gauge the responsiveness of the development teams to address issues raised through SIRs.

3. Cost / Benefit

Many of the projects undertaken by The Department of Education and its contractors are intended to deliver a benefit. This benefit which has a related cost should, in most all cases, be quantifiable either in increased customer satisfaction, decreased operating costs or improved employee morale.

One of the better means of assessing the quality of a final product is to perform a post implementation review. In this review, the Modernization Partner will aim to gauge a measurement for the degree to which a final deliverable was able to meet planned benefits.

The post implementation "Planned" versus "Actual" analysis will result in the following:

- Quantifiable measurements for benefits of each particular project.
- Ability to highlight and measure non-planned benefits which may have arisen out of a development effort.
- Ability to highlight and measure non-planned deficiencies overlooked during the requirements gathering phase.
- A learning tool to be used for future Cost / Benefit analysis.

6.0 Define Continuous Improvement Process

One of the most crucial components of quality management is the objective to avoid previously identified pitfalls. Quality tracking must be comprehensive enough to not only identify and measure project pitfalls and shortcomings, but to provide a mechanism for installing improvements – thus becoming a tool for improving quality rather than [just] tracking it.

The metrics and independent assessments mentioned earlier, will form the basis for a comprehensive lessons learned database. This database may be used to apply issues and resolutions from one project to further enhance the planning of a subsequent project, in addition to updating processes.

7.0 Implement Quality Plan

The Modernization Partner plans to develop a comprehensive quality plan. This plan will include a comprehensive quality check list and criteria against which a variety of projects may be measured. The quality team also will design templates for readiness assessments and independent reviews of projects.

8.0 Perform Quarterly Quality Review (Internal)

Program Management Office plans to survey project level Stakeholders on a quarterly basis. Results of these reviews are shared with major stakeholders and subsequently shared with each team. Follow-up findings with an action plan for addressing deficient areas will be developed and published by the Program Management Office.

Management at all levels of the program will collect and monitor program metrics on a regular basis. PMO will collect, review and publish the quality metrics on a quarterly basis. Identified gaps will be documented with the objective of being avoided in subsequent projects.

9.0 Quarterly Client Quality Management and Assurance Review (External)

Andersen Consulting will perform CQMA independent reviews with experienced individuals within the firm. These Management Reviews will be conducted approximately every three months. The results will be documented in writing and will be available to the SFA COO. Documentation will take the form of a brief status memo, as seen by the reviewer, and include recommendations on how to deal with issues and risks, or how to proceed with particular subjects.

The process includes review of key work products (deliverables) and individual discussions with team members and management.

10.0 Perform Project Quality Checkpoint Reviews - Independent Verification and Validation Review IV&V

The Modernization Partner in conjunction with the SFA and IV &V contractor will conduct IV&V reviews on individual projects as the projects progress from design, through development and testing, to implementation. The IV&V contractor is separate from the Modernization Partner and will be charged with verifying the quality of the project deliverable, adherence to methodologies, and processes.

11.0 Improve Quality Approach

The Modernization Partner expects to improve the quality approach based on the results of its quality reviews, including but not limited to, new or modified metrics, clarified stakeholder expectations and program wide process modifications.

The Modernization Partner intends to utilize the various quality issues to maintain a lessons learned database. We will utilize the data within this tracking mechanism to alter the quality tracking process as necessary.

12.0 Post Implementation Review

On a regular basis, the quality team will conduct “Post Implementation Reviews”. The intention of such a review is to assess the actual benefits of a project with documented expectations. In doing so, the Modernization Partner hopes to measure the degree to which the “Expected Benefits” for a given

project were realized in the post implementation era. This information will be useful in assessing future or related benefits and may be critical in approving additional phases or related enhancements.

Modernization Program Reporting Process

The Modernization Program Reporting Process will provide a variety of reports that will capture the status and overall performance of the program. These are reports generated for use by the project team to help meet project objectives and for program management to monitor overall project progress. These reports typically include: weekly status reports, monthly program reports, and quarterly performance reports.

1.0 Develop Criteria and Metrics

The Modernization Partner will work with the SFA utilizing the 5-Year Annual Performance Plan to develop criteria and metrics to be used for measuring and monitoring project and program performance against established business objectives and the realization of benefits, and cost control for the Modernization Program.

2.0 Measure Criteria

In conjunction with the SFA functional units the Modernization Partner will conduct measurement and monitoring of project and program business objectives, through the use of accurate measurement tools (i.e. financial reporting, surveys, operational measures etc.).

3.0 Consolidate Information

The Modernization Partner will work with the functional units to consolidate information within the functional unit and throughout the organization and program.

4.0 Generate/Distribute Report

The Modernization Partner will distribute reports to the SFA and key external stakeholders through one or more distribution methods depending on the need for information and audience (i.e. Interactive Internet, emails (with attachments), paper-copy). The types of reports to be generated include: weekly status reports, monthly program reports and quarterly performance reports.

The weekly project status report is a narrative of the project status and performance that summarizes results, risks, issues and upcoming plans. It focuses on highlights, exceptions, and matters requiring management attention. Monthly program reports are detailed reports containing financial performance, milestones, timelines, delivery of initiatives, and analysis of variances. Bi-annual performance reports provide a breakdown of the program's progress towards the realization of business objectives, program and SFA performance against goals outlined in the interim and annual performance plans, and overall program financial performance.

5.0 Provide Input 5-Year Performance Plan

This process will provide program performance which will be an essential input into the Interim and Annual performance planning process.